February 21, 2020 9:00AM - 12:00PM

#### **AGENDA**

9:30 - 9:45

9:45 - 10:15

10:15 - 10:30

10:30 - 11:30

11:30 - 11:55

#### **Greenhouse Gas Monitoring and Reporting Rule Stakeholder Meeting**

9:00 – 9:15	Registration
9:15 - 9:25	Welcome & Opening Remarks: Paul Baldauf, Assistant Commissioner, AQES

Ground Rules: Tanya Oznowich, Facilitator, Office of Communications 9:25 - 9:30

Introductions and Background: Robert Kettig, Assistant Director, CCCES

Fossil Fuel & Electric Generation: Ky Asral, Chief, Bureau of Sustainability

Natural Gas Operations: Ky Asral, Chief, Bureau of Sustainability

Other Significant GHG Sources: Ky Asral, Chief, Bureau of Sustainability

Open Discussion

Closing Remarks 11:55 - 12:00



# Greenhouse Gas Monitoring and Reporting Rule Stakeholder Meeting

February 21, 2020





NEW JERSEY
PROTECTING AGAINST
CLIMATE THREATS:

Dramatically cut emissions of greenhouse gases.



# Welcome and Opening Statement



Paul Baldauf, Assistant Commissioner,
Air Quality, Energy and Sustainability Program

NEW JERSEY
PROTECTING AGAINST
CLIMATE THREATS:

Dramatically cut emissions of greenhouse gases.



#NJPACT



#### #NJPACT



- On Jan. 27, 2020, Governor Murphy signed Executive Order 100, directing the Department to establish a greenhouse gas ("GHG") monitoring & reporting program to identify all significant sources of Statewide GHG emissions and monitor progress towards limits in accordance with the Global Warming Response Act ("Act").
- The same day, Commissioner McCabe issued Administrative Order 2020-01, directing the Department to propose such regulations within 12 months and if appropriate, adopt within 18 months.



# Stakeholder Meeting Ground Rules



Tanya Oznowich, Facilitator Office of Communications

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# Introduction of Rule Team



Robert Kettig, Assistant Director, Climate Change, Clean Energy & Sustainability Element

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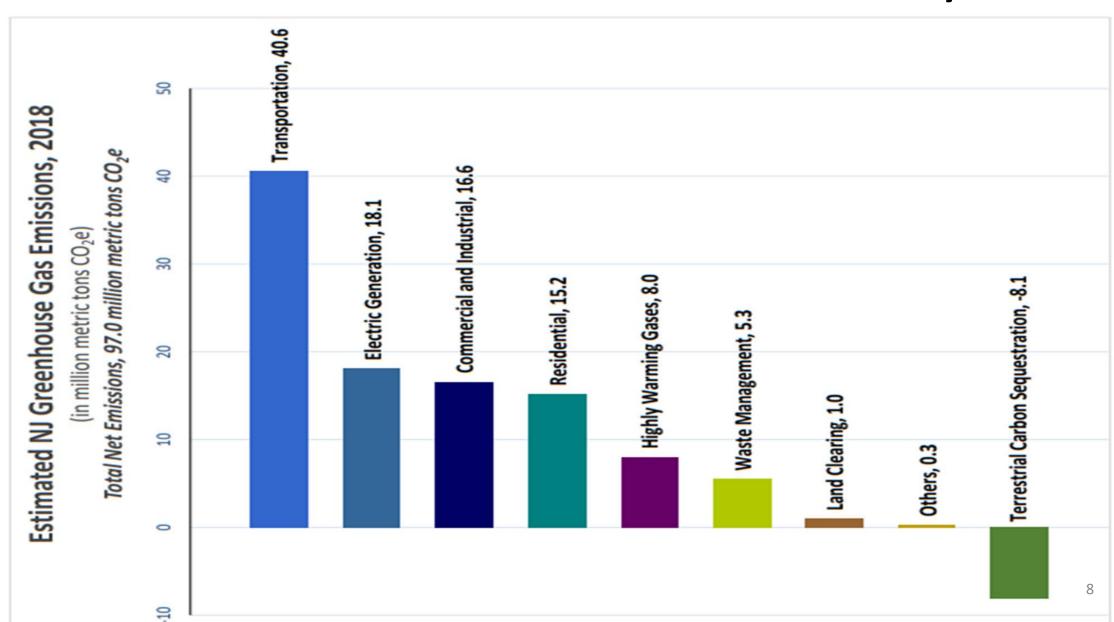
#### **Public Comments**



Accepted through March 6, 2020

Send to <a href="mailto:GHGMRR@dep.nj.gov">GHGMRR@dep.nj.gov</a>

#### NJ 2018 GHG Emissions Inventory





# Discussion





Ky Asral, Rule Manager Chief, Bureau of Sustainability

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**NEW JERSEY** PROTECTING AGAINST **CLIMATE THREATS:** 

> Dramatically cut emissions of greenhouse gases.



### Statutory Requirements



manufacturers and distributors of fossil fuels

EGUs in State and out of State for end use in the State

Must Report GHG Emissions

any gas public utility

significant emitters of GHGs including SLCP, as determined by the Department





Require reporting of GHG emissions: manufacturers and distributors of fossil fuels



fossil fuel distributors currently report information to the Federal government



similar annual NJ reporting will be required as part of this rulemaking



Direct reporting of data State will allow more timely compilation of inventory





The Department intends to require similar Federal reporting of fossil fuel information from manufacturers and distributors, but directly to the Department as required by the legislation. Fossil fuel manufacturers and distributors subject to reporting may include:

- oil refineries, oil storage facilities,
- natural gas pipelines,
- > fuel wholesale and retail distributors.





Fossil fuel monitoring & reporting will collect information on the following:

- Fuel type: e.g., diesel, kerosene, gasoline, and other distillates of petroleum.
- Fuel use: e.g., commercial, industrial, residential, off-road diesel, transportation and other uses.

The Department will utilize this information to calculate GHG emissions from this sector.







U.S. DEPARTMENT OF ENERGY
U.S. ENERGY INFORMATION ADMINISTRATION
Washington, DC 20585

#### FORM EIA-821 ANNUAL FUEL OIL AND KEROSENE SALES REPO REFERENCE YEAR 2018 PART 4. STATE DATA

#### FORM EIA-782C MONTHLY REPORT OF PRIME SUPPLIER SALES OF PETROLEUM PRODUCTS SOLD FOR LOCAL CONSUMPTION

NEI ERENGE TEAR 2010			TAIL STATE DATA			
39	Diesel ≤ 15 ppm Sulfur, Ultra Low					MONTHLY SALES
- 55	Dieser 2 to ppin oundr, olda Low			PRODUCT	PRODUCT	(Thousand Gallons)
40	Diesel > 15 and ≤ 500 ppm Sulfur, Low			(Refer to Definitions)	CODE	(For the report period, enter the total volume sold into the State
	достина в под ружи в под дости					where delivery of product occurs.)
	Off-highway Use: Construction:			Reformulated Gasoline		
41	No. 2 Diesel ≤ 500 ppm Sulfur, Low			Regular	153	
	(include Ultra Low Sulfur)			Midgrade	154	
40	· ·			Premium	155	
42	No. 2 Diesel > 500 ppm Sulfur, High			Conventional Gasoline		
43	Other Distillate			Regular	159	
				Midgrade	160	
	Off-highway Use:			Premium	161	
	Other (Specify e.g., Logging):			No. 1 Distillate	467	
44	No. 2 Diesel ≤ 500 ppm Sulfur, Low			Kerosene	311	
44	(include Ultra Low Sulfur)			No. 2 Fuel Oil	470	
45	No. 2 Diesel > 500 ppm Sulfur, High			No. 2 Diesel Fuel		
	тег 2 2.000. Осторрин однан, гиди			15 ppm sulfur and under	472	
46	Other Distillate			Greater than 15 ppm to 500 ppm sulfur (incl.)	468	
				Greater than 500 ppm sulfur	469	
47	All Other Uses (Specify):			Aviation Gasoline (Finished)	111	
				Kerosene-Type Jet Fuel	213	
48	Sold to Dealers, Resellers, and Refiners:			No. 4 Fuel Oil	471	
				Residual Fuel Oil ≤ 1% sulfur	501	
49	Total Distillate (Add Lines 8 thru 48)			Residual Fuel Oil > 1% sulfur	510	14
		Propane, Consumer Grade	624			



#### Stakeholder Feedback



- a) Are there additional obstacles or costs associated with reporting fuel sales directly to the Department?
- b) Are there any concerns in proceeding as described for this sector?
- c) Are there better ways to collect GHG monitoring and reporting information from fossil fuel manufacturing and distribution that the Department should consider?



#### Electric Generation



Require monitoring & reporting of GHG emissions: from any entity generating electricity for end use in the State



GHG emissions reported through emission statements



out of State GHG emissions calculated by the Department



#### Electric Generation



The Department intends to require monitoring & reporting of GHG emissions from any entity generating electricity in the State and from any entity that generates electricity outside the State that is delivered for end use in the State.

- Currently, in-State sources producing electricity and permitted as a major facility report greenhouse gas information through air emission statements.
- No additional requirements are anticipated for this sector as they already report information necessary to account for their GHG contributions



#### Stakeholder Feedback



a) Any concerns with intended approach?



# Gas Public Utility



Require monitoring & reporting of GHG emissions: from any gas public utility



GHG information is currently reported on Federal forms



similar annual NJ reporting will be required as part of this rulemaking



# Gas Public Utility



The Department intends to require monitoring & reporting of GHG emissions from any gas public utility. "Gas public utility" means a public utility, that distributes gas to end users within the State.

- The Act also requires reporting from fossil fuels used in the State and specifically identifies natural gas pipelines.
- The Department accordingly intends to require comprehensive reporting from natural gas operators.



# Gas Public Utility



Reporting from natural gas operators will collect information on the following:

- Volume of gas received, distributed and stored
- Number of customers and fuel use (e.g., residential, commercial, industrial, electric power, vehicle fuel).
- GHG emissions from natural gas operations: e.g., equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters; blowdowns, venting, flaring, storage tanks, compressing and other operational activities regulated under Federal GHGRP for natural gas operators.



#### Stakeholder Feedback



- a) Are there additional obstacles or costs associated with monitoring & reporting GHG emissions directly to the Department?
- b) Are there any concerns in proceeding as described for this sector?
- c) Currently, transmission line emissions are estimated by loss factors per mile linear pipe. Are there other methods that should be employed to estimate these emissions?
- d) Are there better ways to collect greenhouse gas monitoring and reporting information from natural gas operators and gas public utilities that the Department should consider?



# Other Significant Sources



Require reporting of GHG emissions from any significant emitters of greenhouse gases, as determined by the Department



Methane: Landfills, Natural Gas System Losses



**HFCs:** Refrigerants



Black Carbon: Diesel Emissions



#### Methane Emissions



The Department intends to require monitoring & reporting from sources of significant methane emissions, which may include:

- > landfills,
- natural gas system losses,
- biogas generation.



#### Methane Emissions



Methane reporting will be collected through various methods.

- The Department intends to amend N.J.A.C. 7:27-21 allowing major emitters of methane to submit emission statements annually.
  - Emitters of methane over 100 tons/yr hold Title V air permit. These methane sources will now submit emission statement reporting.
  - This will include landfill gas, biogas generation and other sources of methane emissions of 100 tpy or more.
- Methane emissions from natural gas system losses will be reported under the same forms used for gas public utilities.



#### Stakeholder Feedback



The Department would like to understand the following:

- a) Are there other significant sources of methane emissions that the Department should consider for this rulemaking?
- b) Are there better ways to collect GHG monitoring and reporting information from methane emission sources that the Department should consider?

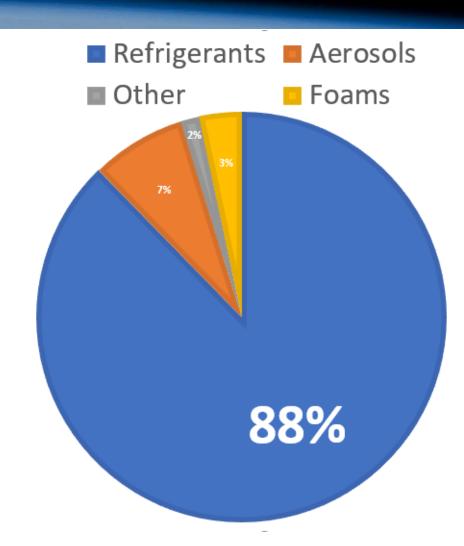


#### HFC Emissions



The Department intends to require reporting from significant emitters of hydrofluorocarbons ("HFCs").

- HFCs are used in refrigeration, heating/cooling systems, aerosols, and foam manufacturing.
- Refrigerants make up more than 87.7% of NJ's overall HFC inventory and <u>are</u> considered significant.





#### HFC Emissions



HFC reporting will be collected from manufacturers and distributors of HFCs within the State.

- Refrigerants are used in refrigeration and air-conditioning to cool & heat and/or dehumidify a substance or space, like a refrigerator cabinet, room, office building, or warehouse.
- The Department intends to develop reporting forms to collect HFC sales from manufacturers and distributors. This information will be used to estimate emissions from repairs and leaks.



#### Stakeholder Feedback



- a) Are there additional obstacles or costs associated with reporting HFC sales directly to the Department?
- b) Are there any concerns in proceeding as described for this sector?
- c) Are there other significant sources HFC emissions that the Department should considered for this rulemaking?
- d) Are there better ways to collect GHG monitoring and reporting information from HFC sources that the Department should consider?



#### Black Carbon Emissions



Black carbon is a short-lived climate pollutant. Since diesel emissions are the main contributing source of black carbon, the Department intends to calculate black carbon emission from diesel fuel usage data.

- Data will be collected from fossil fuel manufacturers and distributors on State reporting forms.
- The Department will calculate black carbon emissions based on the fuel use and volume.



#### Stakeholder Feedback



- a) Are there other significant sources black carbon emissions that the Department should consider for this rulemaking?
- b) Are there better ways to collect black carbon monitoring and reporting information from diesel sources that the Department should consider?



#### Open Discussion



We value your input.

GHG monitoring and reporting required from specific sources and those determined to be significant by the Department.

Is there anything we have not yet covered that should be addressed for this rulemaking?



### Next Steps



- Comments accepted through March 6, 2020
- Send to <u>GHGMRR@dep.nj.gov</u>
- Rule proposal in January 2021
- Rule adoption in July 2021



# Thank You



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